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Sacramento sewage agency looks at selling wastewater

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Californians have grown accustomed to digesting odd ideas that routinely flow out of Sacramento, many of them not so palatable.

But are they ready for this one?

Last week, amid a third year of a statewide drought, the Sacramento Regional County Sanitation District adopted a strategy to sell treated sewage as drinking water. The buyer would hypothetically partner with the district to recycle wastewater from the capital-area's 1.4 million people into a new municipal water source.

The idea is not so far-fetched. Orange County last year opened the world's largest wastewater recycling plant and is now serving treated effluent as high-quality drinking water to 2.3 million residents.

The technology is simpler and cheaper than desalinating seawater. State regulators are working to adjust policies to encourage more such projects.

What's different about Sacramento's plan is that local leaders want somebody else to buy treated sewage and pay to make it drinkable.

"It's kind of like taking lemons and creating lemonade," said Mike McGowan, a Yolo County supervisor and sanitation district board member.

At the heart of the issue is the Sacramento-San Joaquin Delta. The estuary is suffering a puzzling ecosystem collapse that threatens extinction of several fish species.

Suffering along with the fish are 23 million Californians who depend on Delta water supplies, from the Bay Area to San Diego.

These diversions have been curtailed to protect the environment, and may be reduced further this year in response to drought.

One culprit in the Delta's decline is water pollution. Sacramento's treated effluent is the largest single source of urban wastewater in the Delta, though the harmful effects of this source are a matter of dispute.

A key component of the Sacramento waste stream is ammonia, a common byproduct of human urine and feces. Ammonia in Sacramento's wastewater has more than doubled since 1985 because of rapid urbanization, and is now about 125,000 gallons per month.

Recent research suggests ammonia may be disrupting the Delta by limiting blooms of phytoplankton, tiny animals that form the foundation of the aquatic food chain.

The sanitation district questions the scientific findings so far, and has gone on the offensive to forestall modernizing its treatment process. It estimates treatment upgrades could cost as much as $1 billion, requiring household sewer rates to triple to $90 a month.

The idea to instead sell effluent is a creative wrinkle in the district's strategy.

The region's total wastewater discharges amount to a lot of water – about 180,000 acre-feet per year. That's enough to serve nearly 400,000 average households.

"We cannot simply sit back and complain and say this Delta is going to cause us problems, and expect things to go away," said District Manager Stan Dean. "We need to set ourselves up to be part of a broader solution."

Even district critics admit the recycling scheme is a clever approach that could help the Delta. But they also note a potential for negative side-effects.

The most obvious is that a buyer could divert the water out of the Delta watershed, causing another drain on an already stressed ecosystem.

"We would have serious issues with diverting that water out of the watershed," said Bill Jennings, executive director of the California Sportfishing Protection Alliance and longtime water-quality watchdog. "In all fairness, I want to see their proposals. It's an intriguing concept, in the sense that the important thing is to get the water adequately treated so it doesn't degrade the Delta."

District officials said they are willing to negotiate with any interested party, whether a local water agency or the sprawling Los Angeles metropolis. It could serve the latter, for example, by pumping recycled wastewater into a controversial canal proposed to divert a portion of the Sacramento River around the Delta.

"When you shift your point of view from looking at effluent as a waste product to looking at it as a valuable commodity, that changes your whole thinking on who your potential customers could be," said District Engineer Mary Snyder.

Another key question is whether the district has a legal right to sell the water at all. The district maintains that it does, and state law appears to support that.

Gregory Weber, an expert in water law at McGeorge School of Law, said a provision of the state Water Code holds that a water treatment entity gains an ownership stake in the water it treats.

The diversion issue is a thornier one, he said, which would have to be reviewed to avoid harm to the environment.

"There are potential downstream impacts on fish, wildlife and habitat," Weber said. "Downstream water rights holders who have already been appropriating the discharges may be complaining as well."

In other words, the recycling plan could be perceived as an attempt to take more water out of an estuary where there is none to spare.

McGowan cautioned fellow board members, all of them local elected officials, of a possible political backlash.

"If that's what we're going to do, we're picking a big fight," he said. "But to do nothing will see us complaining in a couple years."

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  JOS LUIS VILLEGAS Sacramento Bee file, 2008 Josh Declusin of the Sacramento Regional Sanitation District inspects a discharge pump last May near the Freeport Bridge. The agency is seeking to sell its wastewater and have it made potable.